

## ELONGATED NANO-STRUCTURES AND RELATED DEVICES

### ABSTRACT

[0056] In a method of making an elongated carbide nanostructure, a plurality of spatially-separated catalyst particles is applied to a substrate. The spatially-separated catalyst particles and at least a portion of the substrate are exposed to a metal-containing vapor at a preselected temperature and for a period sufficient to cause an inorganic nano-structure to form between the substrate and at least one of the catalyst particles. The inorganic nano-structure is exposed to a carbon-containing vapor source at a preselected temperature and for a period sufficient to carburize the inorganic nano-structure.